Help wanted: young adults' sources of support for questions about digital media

Micheli, Marina ; Redmiles, Elissa M. ; Hargittai, Eszter

Abstract: Social support can play a critical role in the development of Internet skills. Research on support-seeking for digital media use has primarily considered informal sources such as family and friends, and formal sources such as people employed to provide assistance. Yet, people may also seek support online. Social network sites and other online communities are often used to ask questions on a wide range of topics from both friends and strangers. Drawing on a survey of young adults aged 25–26, we find that online question-asking, although used less frequently than informal and formal support, is a relevant source of support, which expands users' available resources and has the potential to improve Internet skills. Results show that Internet skills and social capital explain differences in support-seeking behaviors among young adults informing our understanding of how inequities in social support, and ultimately digital inequalities, manifest themselves in this realm of Internet use.

DOI: https://doi.org/10.1080/1369118X.2019.1602666

This is the accepted pre-print version of the paper forthcoming in

Information, Communication & Society

Help Wanted: Young Adults' Sources of Support for Questions about Digital Media

Marina Micheli, IKMZ, University of Zurich

Elissa Redmiles, University of Maryland

Eszter Hargittai, IKMZ, University of Zurich

Abstract

Social support can play a critical role in the development of Internet skills. Research on support-seeking for digital media use has primarily considered informal sources such as family and friends, and formal sources such as people employed to provide assistance. Yet, people may also seek support online. Social network sites and other online communities are often used to ask questions on a wide range of topics from both friends and strangers. Drawing on a survey of young adults aged 25-26, we find that online question-asking, although used less frequently than informal and formal support, is a relevant source of support, which expands users' available resources and has the potential to improve Internet skills. Results show that Internet skills and social capital explain differences in support-seeking behaviors among young adults informing our understanding of how inequities in social support, and ultimately digital inequalities, manifest themselves in this realm of Internet use.

Keywords: Digital Divide, Internet Skills, Social Support, Young Adults, Survey

Word count: 7996

Help Wanted: Young Adults' Sources of Support for Questions about Digital Media

Introduction

Early studies about Internet use showed that individuals turn to people in their social network to ask for technical help, seek advice about digital media, and solve difficulties in finding information (Bakardjieva, 2005; DiMaggio, Hargittai, Celeste, & Schafer, 2004; Hargittai, 2003; Kiesler, Zdaniuk, Lundmark, & Kraut, 2000). Users especially turn to informal sources available in their close-knit network such as relatives and friends. However, those relying on such sources have lower levels of Internet skills compared to those who consult formal sources such as IT staff and colleagues, or who are self-reliant (Courtois & Verdegem, 2014; Helsper & van Deursen, 2017; Redmiles, Kross, & Mazurek, 2016). Accordingly, this work suggests that digital inequalities may be at play when it comes to obtaining help with questions about digital media use (the Internet and mobile technologies), the focus of this paper.

In one of the earliest papers about digital inequality, DiMaggio and colleagues (2004) posited that an unequal distribution of the "*social support* on which Internet users can draw" (p. 376) contributes to the reproduction of social inequalities in the digital sphere. They conceptualized social support as one of five dimensions of digital inequality, the others being "technical means," "autonomy of use," Internet skills, and "purposes of use" (DiMaggio et al., 2004). While considerable digital inequality research has focused on these other four dimensions, surprisingly little scholarship has investigated social-support seeking (see Courtois & Verdegem, 2014; Helsper & van Deursen, 2017; Redmiles et al., 2016 for a few notable exceptions), despite the potential to influence users' motivation to go online and their Internet skills (DiMaggio et al., 2004). With this paper, we address three important aspects missing from current research on support-seeking about Internet use in digital inequality

scholarship: (1) people may ask for help also online; (2) young adults who grew up with technologies as part of their everyday lives, in particular, may need help with their digital media uses despite assumptions about their universal savviness with technologies (see Vaidhyanathan, 2008 for a helpful critique of those assumptions); and (3) the social resources upon which people can draw (bridging and bonding social capital) may be related to who utilizes such resources.

First, we consider that people might ask for help online in an attempt to tap into the knowledge of their weak ties as well as gain support from people whom they do not know at all. While prior work has shown that the Internet itself offers important resources for people in their quest to find answers (Jeon & Rieh, 2015; Morris, Teevan, & Panovich, 2010; Oeldorf-Hirsch, Hecht, Morris, Teevan, & Gergle, 2014), rarely have studies included online question-asking among the possible sources of support for addressing digital media use questions. As an attempt to mobilize one's own social network (Ellison, Gray, Lampe, & Fiore, 2014), online question-asking is a valuable method for support seeking, thus it could also be adopted to solve digital-media-related issues.

Second, we consider support-seeking practices among young adults, people who are college-age or a bit older and grew up with technologies. Research on support seeking about Internet use within digital inequality scholarship has overlooked this group. There is a significant variation among young people concerning their Internet skills (Bennett & Maton, 2010; Hargittai, 2010; Gui & Argentin, 2011; Robinson, 2014; Correa, 2016; Davies, 2017) and several studies have shown that people in this group possess low skills in the domain of information retrieval and evaluation in particular (Metzger, Flanagin, Markov, Grossman, & Bulger, 2015; Gui & Argentin, 2011; Hargittai, Fullerton, Menchen-Trevino, & Thomas, 2010; Rowlands et al., 2008). Given variations in Internet skills, we cannot assume that social

support is not important for digital inclusion among this population segment. However, research has rarely taken into consideration the support-seeking strategies adopted by young adults. Third, the literature on online question-asking about Internet use has not accounted for people's bridging and bonding social capital, that is, people's social resources both among those they know well and those with whom they are less tightly connected (Williams, 2006).

To address such gaps in the literature, this paper analyzes data collected from a survey administered to a diverse group of young adults. In particular, it examines the relationship between socio-demographic characteristics, Internet skills and experiences, and social capital with the use of informal and formal support sources, as well as online question-asking for support with using digital media.

Sources of support for Internet use

People's social context of available support is a crucial dimension for media and technology adoption. Before Internet use became widespread, media scholars examined how users made sense of media technologies based on values of their family and social circle, as well as the practical arrangements of their households and their everyday routines (e.g., Silverstone & Hirsch, 1992). Science and technology studies scholars have claimed that learning to use a certain technology is not only a matter of acquiring specific abilities, but also largely depends on acquiring shared social and cultural values (Williams & Edge, 1996). Early studies of Internet use also acknowledged that users' social and domestic contexts deeply influence what they do online (Bakardjieva, 2005; Hargittai, 2003). In particular, strong social ties can be crucial for people's Internet skills: "people's Web use is significantly influenced by their social surroundings. Users turn to their social support networks for advice on use of the Internet." (Hargittai, 2003).

The support people can access to for their digital media use depends on their social capital (Bourdieu, 1986; Putnam, 2000; Lin, 2001). Social capital does not correspond directly to someone's network of social relations, but to the material and intangible resources these relationships bring (Ellison et al., 2014). The literature distinguishes between two types of social capital. Bonding social capital stands for resources accessed from people an individual knows well. Bridging social capital refers to resources obtained from people with whom someone is less closely connected (Williams, 2006). Conventionally, bonding social capital is expressed through emotional support and assistance, while bridging social capital contributes to increasing someone's knowledge, perspectives and (job) opportunities (e.g. Granovetter, 1973). Both types might provide support for digital media use.

DiMaggio and colleagues (2004) hypothesized two types of sources of support available to Internet users: "friends and family members" and "persons employed to provide it (for example, workplace support staff, customer support staff, librarians, and teachers)" (DiMaggio et al., 2004, p. 379). They expected that both types of sources would enhance people's Internet skills and support their Internet use. The authors theorized that family and friends were particularly relevant because they could offer both "technical assistance" and "emotional reinforcement" (DiMaggio et al., 2004).

Although early studies of Internet use assigned a prominent role to informal sources in one's close-knit network (see also Bakardjieva, 2005), subsequent inquiry into this type of support challenged its relevance (Helsper & van Deursen, 2017; Redmiles et al., 2016; van Deursen, Courtois, & van Dijk, 2014). In particular, research shows that those seeking help in their immediate social circle, such as family and friends, have lower levels of Internet skills, whereas highly skilled users tend to be self-reliant and seek out formal support (Courtois & Verdegem, 2014; Dutton & Helsper, 2007; van Deursen et al., 2014). Research has also found

that women and users from lower socioeconomic backgrounds count mostly on their close-knit networks to find help for their questions and problems with digital media (Courtois & Verdegem, 2014; Dutton & Helsper, 2007; Helsper & van Deursen, 2017; Redmiles et al., 2016; van Deursen et al., 2014). Thus, findings suggest that support-seeking behavior varies by background characteristics.

Existing studies, however, seem to overlook that people might also look for support online by posting questions on social network sites, online forums or Q&A (question-and-answers) sites. Morris and colleagues (2010: 1740) defined "social search" as the "process of finding information online with the assistance of social resources" who may, for example, answer posted questions. The authors distinguished these practices from search engines and other non-social resources available online.

Social network sites are regularly used to get assistance (Ellison, Gray, Vitak, Lampe, & Fiore, 2013; Utz & Breuer, 2017; Vitak & Ellison, 2013; Yang, Morris, Teevan, Adamic, & Ackerman, 2011). Prior work has examined the quality of answers obtained through queries people post on social media, finding that people consider answers from weak ties to be more useful and satisfying than those received from strong ties (Gray, Ellison, Vitak, & Lampe, 2013). Overall, by asking questions on social media, users engage in "mobilization attempts" (Ellison et al., 2014): they are explicitly making requests to other members of their network and as outcome they might obtain useful information, advice, and in some cases even material help. Through online question-asking, information available within online social networks can be converted into useful resources. Yet, little is known about who asks questions on social network sites as a strategy to seek technical support and advice for digital media use specifically about Internet use.

To increase the chances of obtaining helpful information, Internet users might also ask questions from people beyond their personal contacts. For example, they may post a question in an online forum, an online community, or a Q&A site (such as Quora and Stack-Exchange) taking advantage of the Internet's so-called "collective intelligence" (Jenkins, Clinton, Purushotma, Robison, & Weigel, 2006). From self-help groups and early online communities, the Internet has always offered several means to find and exchange support, especially for members of stigmatized communities, people with difficult health conditions or sharing a particular life event (e.g., motherhood, unemployment, people with depression) (Burrows, Nettleton, Pleace, Loader, & Muncer, 2000; Drentea & Moren-Cross, 2005; Fogel, Albert, Schnabel, Ditkoff, & Neugut, 2002; Plantin & Daneback, 2009; Shillair, Rikard, Cotten, & Tsai, 2015). People participating in these groups do not just get emotional support, but also instrumental support and useful information. Research shows that people seek help from such online outlets when they lack the equivalent support in their everyday social world offline (Cummings, Sproull, & Kiesler, 2002; Davison, Pennebaker, & Dickerson, 2000). As for question-asking on social network sites, little is known about who uses online forums and Q&A sites to find help and advice about digital media, although such forums can be a useful resource for those who lack support in their social surroundings[1].

In our contribution, we distinguish online question-asking as a specific type of support people may use to seek help for digital media use. We examine it alongside two other types of sources, informal sources available in one's close-knit network, and formal sources, which

[1] Research on the design of Q&A sites, questions posted, effectiveness of online question-asking, and reputation mechanisms has been carried over within literature on HCI (e.g. Patil & Lee, 2016; Paul, Hong, & Chi, 2012).

existing work on digital inequality has already investigated (Courtois & Verdegem, 2014; DiMaggio et al., 2004; van Deursen et al., 2014).

This paper brings three main contributions to the literature. It focuses on young adults, a category of users that is often portrayed as self-reliant in their digital skills despite many lacking in such skills; it compares online question-asking with more traditional types of support sources; and it accounts for the influence of both online and offline social capital. More specifically, in this study we ask: to what extent do socio-demographic factors, Internet experiences and skills, and online and offline social capital relate to whether young adults use specific sources of support (RQ1), the diversity of their support sources (RQ2) and the frequency of their use of said support sources (RQ3)?

Methods

The data set is the third wave of a panel study of young adults conducted in the US Midwest from 2009 to 2016. The goal of the overall project was to examine how a group of diverse first-year college students at a non-flagship campus of a state university system incorporated the Internet into their lives, and how this continued over the years as they either finished college or went on to pursue other career trajectories. All three waves included numerous questions about Internet use experiences and skills, some of them repeated over time, others changed as digital media evolved during the 7-year period.

Data Collection

The data set includes responses from 385 young adults aged 25-26 surveyed in summer 2016 through postal mail in the United States. The first wave had 1,115 participants, the second in 2012, 547. Of the 2012 participants, 70% responded in 2016 (35% of the original 2009 participants). The original survey included questions about demographic and socioeconomic characteristics. The 2016 sample is representative of the 2009 sample on most

socio-demographic measures except that it has a smaller proportion of African Americans (8% compared to the original 11%). In terms of Internet experiences and skills (see measures below), the 2016 group is representative of the earlier samples on all measures of interest.

Measures: Independent Variables

Socio-demographics. We asked respondents in what year they were born to calculate their age. Gender was a binary question of male or female. We used parental education as a proxy for socioeconomic status (SES) since more traditional measures of SES do not work with a group of young adults. We asked respondents to report the education level of both their mother and their father. We aggregated this information by considering the highest level of education that either parent of a student has. Our measures of race and ethnicity follow U.S. Census conventions (U.S. Census Bureau, 2000).

Internet experiences and skills. To account for quality and quantity of Internet experiences, we measured frequency of use, autonomy of use, and Internet skills. For the first, we asked respondents "*not* counting time spent on email, chat and phone calls, about how many hours do you spend visiting Web sites" on an average weekday and on an average Saturday or Sunday. We then calculated a weekly Web-use figure from these measures. For user autonomy, we asked respondents to check off where from ten different locations (e.g., "your home," "library or computer lab," "work") they have Internet access and take the sum of these. The Internet skills measure draws on prior literature (Wasserman & Richmond-Abbott, 2005) asking respondents to rate their level of understanding of 27 Internet-related terms (such as blog, PDF, tagging) on a five-point scale ranging from "no understanding" to "full understanding". We then calculate the mean for all items as the Internet skills measure (Cronbach's alpha=0.95).

Social capital. To measure social capital we use Williams' (2006) Internet Social Capital Scales (ISCS), a validated measurement tool composed of four different scales assessing bridging and bonding social capital in both online and offline contexts. Bridging social capital measures people's perception of being part of a larger community and having access to a wide range of experiences and ideas (e.g., "Interacting with people online makes me want to try new things"). Williams' scales distinguish between bridging social capital online (6 items, Cronbach's alpha=0.85) and bridging social capital offline (6 items, Cronbach's alpha=0.85). Bonding social capital measures people's perception of being able to obtain emotional and functional support from strong ties, such as family members and close friends (e.g., "When I feel lonely, there are several people offline I can talk to"). We adopted Williams' separate scales for bonding social capital online (6 items, Cronbach's alpha=0.94) and bonding social capital offline (6 items, Cronbach's alpha=0.91). Respondents rate their level of agreement with items on a five-point scale (from "strongly disagree" to "strongly agree").

Measure: Dependent Variable

Support sources for digital media use. The survey included the following question: "When you run into a problem or question about using digital media, which of the following do you do? For each option, check how often you respond that way." We listed a dozen possible approaches that people may take to finding an answer to their question, and for each, respondents could mark "never," "rarely," "sometimes," or "often." The approaches were: "I think through different ways of solving the problem," "I get discouraged and give up on the task," "I do an online search to find a solution (like using Google or Bing)," "I post a question about it on a site where people I know may respond (such as Facebook)," "I post a question

about it on a site where people I don't know may respond (such as an online forum)," "I contact my organization's technical support for help," "I ask a family member for help," "I ask a close friend for help," "I ask an acquaintance for help," "I ask a colleague for help," "I ask a librarian for help," and "I pay someone to help me."

We recoded each variable to never (0) versus ever (1) to see which sources are the most popular, and also to calculate the diversity of sources people consult. The variables were grouped into the following three types: *informal sources* (asking for help from a family member; a close friend; a colleague; an acquaintance); *formal sources* (contacting technical support; asking a librarian; paying someone); and *online question-asking* (posting a question on a site where the respondent knows people; posting a question on a site where the respondent does not know people).

We created a dichotomous variable for formal sources and online question-asking that indicates whether a user relies on that type of source (we did not create an equivalent variable for informal sources because almost all respondents (96%) report using such support). We defined diversity as the number of different sources of a particular type. For informal sources, for example, one could have a diversity score ranging from 0-4. We generated a diversity score for each type of support (informal, formal, and online).

Frequency, instead, is the maximum frequency with which a respondent uses any of the sources belonging to a type and it varies between 1 ("rarely"), 2 ("sometimes") and 3 ("often"). Therefore, if one user "often" (3) asks for help from an IT professional in her organization, but never asks for help from a librarian and has rarely paid someone for help, we would define her frequency of using formal help as "often" (3). We again generated a frequency score for each type of support.

The Sample

Table 1 summarizes the demographics, Internet uses, and social capital of our sample. Sixty percent of the 385 respondents are female. Less than half (43%) are White, 23% are Asian/Asian American, 23% are Hispanic, 8% are African American, less than one percent are Native American. About a quarter come from families where neither parent has more than a high school degree, an additional quarter have parents who have some college education, but not a college degree, and the rest come from families where at least one parent has a college or graduate degree. In terms of their Internet uses, they range from using it just a couple of hours a week to eight hours a day with a 21 hour weekly average, and have access at anywhere from one to ten locations averaging eight locations. Participants' Internet skills vary from barely understanding Internet-related terms to considerable familiarity with digital media (mean: 3.5, standard deviation (SD): 0.8). Participants' answers to the social capital measures also show a range of social support. Participants had the highest average offline bridging social capital (mean: 4.5, SD: 0.6), followed by offline bonding (mean: 4.1, SD: 0.8), online bonding (mean: 3.3, SD: 1.1), and finally online bridging (mean: 2.9, SD: 1.0). On the whole, while everyone in the sample has been an Internet user for many years, these young adults' online experiences vary considerably.

Analyses

To understand the relationship between our independent and dependent variables, we use two types of logistic regression. First, we use binomial logistic regression where the dependent variable is dichotomous expressing whether a respondent reported consulting either or both of the possible online support sources. We construct two such models. One includes the independent variables described above, while the second also includes controls for use of

other types of support sources (i.e., two dichotomous variables expressing whether the respondent reported consulting formal sources and informal sources). Second, to examine the diversity and frequency of various support sources, we construct ordinal logistic regression models for each type of support. We construct two models for each type of support: in the first the dependent variable is the diversity of sources; in the second, frequency of use is. Both models include all independent variables. When reporting regression results for all models, we show the log-adjusted regression coefficient (odds ratio) and indicate significance. There are no concerns of multicollinearity among the independent variables.

Results

Popularity of Support Sources for Digital Media Use

Figure 1 shows the popularity of the various sources of support to which respondents turn when they have a problem or want to learn more about digital media. Overall, asking for support is common among participants, with all but five of our respondents reporting having sought out support for their digital media uses from a formal, informal, or online source. In particular, the vast majority (96%) of young adults consult informal sources: friends (93%), family (86%), colleagues (86%), or acquaintances (80%).

We find that young adults consult formal sources of advice less often than informal sources, with just over three in four young adults consulting at least one formal source. Asking questions about digital media from technical support in the workplace is the more common way to do so, with 73% of respondents doing this at least rarely. Just under a third of respondents report asking a librarian and even fewer than that (23%) pay for assistance.

Posting questions on sites is the least popular type of method for support seeking, although certainly a source these young adults utilize with 65% of those in our sample

reporting asking questions online about digital media use. Asking people the respondent knows on sites like Facebook is more common (59%) than turning to forums of strangers (43%). In comparison to specific types of other methods (e.g., asking a librarian or paying for help), online support-seeking is relatively popular.

Getting Advice Online

To investigate young adults' support seeking online, we examined the relationship between online question asking and four classes of independent variables – socio-demographic factors, Internet experiences and skills, social capital, and other support sources. Table 2 shows the results of two logistic regression models (Model 1 and Model 2) explaining whether young adults post questions online.

We find that women are equally as likely as men to ask questions about digital media online. In contrast, we observe differences by socioeconomic background, Internet-related variables, and social capital. First, parents' level of education seems to be inversely related with this source of support: young adults whose parents have at least a college education are far less likely to ask questions online than those with parents who have no more than a high school education (Model 1). Second, young adults with higher-level skills are more likely to seek support online than those with lower skills. Third, a greater amount of online bonding social capital is significantly associated with online question-asking. These effects remain significant after we control for a respondents' use of the other types of support sources (Model 2). Additionally, we find that those who seek out advice about digital media from formal sources are also far more likely to ask questions online.

To understand better the role of online question-asking in support-seeking for digital media use, we also look at the elements that make up the online question-asking category

independently by constructing binary logistic regression models for the two different types of online support: posting a question on a site where known people may respond (such as Facebook) and posting a question on a site where unknown people may respond (such as an online forum) (Table 3). For brevity, we will also refer to these items as online Q&A (question asking) on social network sites and online Q&A on online forums. In our models, we include socio-demographic factors, Internet skills and experiences, social capital, and other sources of support.

We find that women are more likely to post questions on social network sites than men and that those whose parents have a college education or above are less likely to seek support through social network sites (Model 1). Higher Internet skills are significantly related to higher likelihood of asking questions on such sites (Model 1). Additionally, online bridging social capital increases the likelihood of asking questions to known people on social media (Model 1). Once we control for other support sources in the model, we find that asking for support from IT professionals and using the other source of online support (asking questions on online forums of strangers) are both significantly related to asking questions about digital media on social media (Model 2). Gender and online bridging social capital remain significantly related to question asking on social media in Model 2. However, Internet skills and parental education are no longer significant after controlling for other support sources (Model 2).

In our analysis of online question asking on forums made up of strangers, we find, as with social network sites, that those whose parents have a college degree or higher educational attainment are less likely to seek online support from strangers than those whose parents have at most a high school degree (Model 3). Furthermore, as above, higher Internet

skills are significantly related to a higher likelihood of turning to this source of support (Model 3).

In contrast to our findings for online question-asking on social network sites, we find that women are less likely than men to turn to online forums of strangers when seeking support for digital media use (Model 3). Additionally, in contrast to question-asking on social media, which is related to online *bridging* social capital, online *bonding* capital increases the likelihood of asking questions from strangers (Model 3). After controlling for other support sources, we find that asking questions from strangers using online forums has a very strong positive correlation with posting questions to known people on social network sites, while it is negatively correlated with seeking help from colleagues (Model 4). Gender, Internet skills, and online bonding social capital remain positively related at a statistically significant level to asking questions from strangers online in Model 4, while parental education becomes non-significant.

Diversity of Sources

Diversity of sources refers to the number of source types within each category (online, informal, formal) that respondents report having consulted. Overall, we find that the majority of our respondents consulted more than one of each type of support source: 59% of those who asked questions online asked questions of both people they knew and strangers; 97% of respondents who reported seeking out support from informal sources consulted at least two such sources (72% reported consulting all four informal sources that we included); and 54% of those who sought out advice from formal sources consulted at least two of the three. Table 4 shows the results of ordinal logistic regression models on the diversity of online question-asking, informal support, and formal support .

We find that Internet skills, and both online bonding and bridging social capital are positively correlated with using both sources of online support (Model 1). In contrast, Internet skills are negatively correlated with diversity of informal support sources (Model 2) and exhibit no significant relationship with diversity of formal support sources (Model 3). On the other hand, greater diversity of informal support is positively correlated with online and offline bonding social capital, and is negatively correlated with offline bridging social capital (Model 2). Greater diversity of formal support is positively correlated only with online bridging social capital (Model 3).

Frequency of Support Seeking

Overall, 25% of respondents sought support *online* no more than rarely, 11% did so sometimes, and 8% did so often. In contrast, the respective number for seeking support from *informal* sources are 8% (rarely), 50% (sometimes) and 38% (frequently), and for *formal* sources are 25% (rarely), 38% (sometimes) and 14% (frequently). To explain these differences in frequency, we ran a series of ordinal logistic regression analyses (Table 5).

We find no significant relationships between any of our independent variables and frequency of online question-asking (Table 5, Model 1). However, we find that women are far more likely to seek support from informal sources more often (Model 2) and are also more likely (even if to a lesser extent) to seek support from formal sources more often (Model 3). Additionally, autonomy of use (i.e. accessing the Internet from numerous locations) and offline bridging social capital are both positively correlated with more frequent use of informal support (Model 2).

Discussion

The first research question asked which specific sources of support young adults use

when they need help with their digital media uses (RQ1). Most turn to informal contacts (96%), but significantly also consult formal (77%) and online sources (65%). Posting questions online is the least popular type of source. Yet, 59% respondents ask to people they know on sites like Facebook and 43% turn to strangers online, which makes online support-seeking a relatively popular method in comparison to others (e.g., asking a librarian or paying for help). The second research question asked about diversity of sources (RQ2) where we find that higher skilled users are *less* likely to turn to a wide range of sources from their close-knit network, confirming others' finding about inverse relationship between informal support sources and Internet skills (Courtois & Verdegem, 2014; Dutton & Helsper, 2007; van Deursen et al., 2014). The analysis of the frequency of the use of support sources (RQ3) showed that women seek support more often both from informal and formal sources (see also Helsper & van Deursen, 2017; Redmiles et al., 2016; van Deursen et al., 2014).

One of the main contributions of this paper to the literature on digital inequality and support-seeking for Internet use is to consider the relevance of online question-asking, and to distinguish between two such approaches: posting questions on a site where people the respondent *knows* may respond (such as Facebook), and posting questions on a site where people the respondent *does not know* may respond (such as an online forum). Results show that socioeconomic status is related to both types of online question-asking, but young adults whose parents are more educated are *less* likely to seek support online. This is perhaps due to the fact that young adults from more resourced backgrounds already have access to authoritative sources of information within their formal and informal contacts. Further, those with lower Internet skills are less likely to turn to online sources, perhaps due to fewer experiences or difficulties with using online platforms.

Socioeconomic status and Internet skills exhibited similar relationships to both types of online support seeking. While gender is also related to online question-asking, the direction of this relationship varies by the approach to asking a question. Women are more likely to ask questions to people they know, while they are significantly less likely to ask questions to strangers. This finding is in line with prior work showing that online communication may be a more private realm for women than for men (see, for example, Litt & Hargittai, 2014 regarding photo-sharing by level of privacy). This result suggests that women may be less likely to benefit from the opportunity offered by online forums to seek support outside existing close-knit networks. That said, while gender relates to *whether* a person asks a question of a particular audience, it is not related to the diversity nor frequency of online sources respondents consulted. This perhaps suggests that once the barrier to entry into online question-asking on more public forums is overcome, drawing on such resources is relatively equitable by gender.

Finally, the paper considers the relationship between online support-seeking and different types of social capital finding that those who have access to a broader range of social resources online are more likely to engage in online question-asking. However, different methods of online question-asking draw on different types of social capital. Counter intuitively, online *bonding* social capital positively correlates with posting questions to *strangers* online, while only online *bridging* social capital is positively correlated with posting question to *known* people. This suggests that the ability to form bonds online may be a prerequisite to elicit support from online strangers, while the ability to leverage weak-ties is crucial for obtaining support from an existing social network. The latter corroborates Gray and colleagues' (2013) result that weak-ties on social network sites tend to provide more

useful answers than close friends, suggesting that online bridging social capital matters more in certain instances than bonding social capital.

As all studies, this one is not without limitations. Although the sample was diverse in terms of socioeconomic background and ethnicity, all respondents had at minimum started college, which places them above average education. A more geographically varied sample could provide a more comprehensive picture of support-seeking behavior among young adults. Furthermore, a mixed-methods approach, that combines survey data with semi-structured interviews, could be useful for reaching a fuller understanding of the different behaviors.

Conclusion

This article examines young adults' support-seeking behaviors for digital media use. We explore the role of social support in the reproduction of digital inequality among a population that is often depicted as self-reliant with technology. Similarly to other domains of digital inequality research, we find that simply being a frequent long-term Internet user does not mean that one does not encounter challenges with the Internet for which one seeks support. Additionally, we find variations in the means used to seek support by user background corroborating other work that emphasizes a focus on differences by socio-demographics and Internet skills.

We expand previous research on support-seeking by focusing on the use of online question-asking for digital media support. We find that online question-asking is a significant source of support, with 65% of young adults in our sample reporting having used this type of support when they "run into a problem or question about using digital media." However, this

source of support is not used equally by different people. We find evidence of differentiated use based on gender, socioeconomic status, Internet skills, and online social capital.

Our research raises questions about young adults' use of social media when they encounter a difficulty. While heavily used, fewer respondents draw on online support and do so less frequently than offline support sources. This suggests that posting questions online might be perceived as "the last resort" for solving digital media questions, or that online question-asking may depend on young adults' norms about what is appropriate to ask online and what is not. Thus, future work is needed to further explore *why*, *when,* and about *what* digital media topics young adults turn to various sources. Additionally, future work should focus on other topics about which young adults may seek input and see how online resources compare in support seeking in other domains. Having established that different young adults approach their question-asking about digital media queries differently, the present paper lays the ground for more work on question-asking in other domains.

References

Bakardjieva, M. (2005). *Internet Society: The Internet in Everyday Life*. London: Sage.

Bennett, S., & Maton, K. (2010). Beyond the 'digital natives' debate: Towards a more nuanced understanding of students' technology experiences. *Journal of Computer Assisted Learning*, *26*(5), 321–331. https://doi.org/10.1111/j.1365-2729.2010.00360.x

Bourdieu, P. (1986). The Forms of Capital. In J. G. Richardson (Ed.), *Handbook of Theory and Research for the Sociology of Education* (pp. 241–258). Westport, CT: Greenwood Press.

Burrows, R., Nettleton, S., Pleace, N., Loader, B., & Muncer, S. (2000). Virtual Community Care? Social Policy and the Emergence of Computer Mediated Social Support. *Information, Communication & Society*, *3*(1), 95–121. https://doi.org/10.1080/136911800359446

Correa, T. (2016). Digital skills and social media use: how Internet skills are related to different types of Facebook use among 'digital natives.' *Information, Communication & Society*, *19*(8), 1095–1107. https://doi.org/10.1080/1369118X.2015.1084023

Courtois, C., & Verdegem, P. (2014). With a little help from my friends: An analysis of the role of social support in digital inequalities. *New Media & Society*, *18*(8), 1508–1527. https://doi.org/10.1177/1461444814562162

Cummings, J. N., Sproull, L., & Kiesler, S. B. (2002). Beyond hearing: Where the real-world and online support meet. *Group Dynamics: Theory, Research, and Practice*, *6*(1), 78–88. https://doi.org/10.1037/1089-2699.6.1.78

Davies, H. C. (2017). Learning to Google: Understanding classed and gendered practices when young people use the Internet for research. *New Media & Society*, 1461444817732326. https://doi.org/10.1177/1461444817732326

Davison, K. P., Pennebaker, J. W., & Dickerson, S. S. (2000). Who talks? The social psychology of illness support groups. *American Psychologist*, *55*(2), 205–217. https://doi.org/10.1037/0003-066X.55.2.205

DiMaggio, P., Hargittai, E., Celeste, C., & Schafer, S. (2004). Digital Inequality: From Unequal Access to Differentiated Use. In K. Neckerman (Ed.), *Social Inequality* (pp. 355–400). New York: Russell Sage Foundation.

Drentea, P., & Moren-Cross, J. L. (2005). Social capital and social support on the web: the case of an internet mother site. *Sociology of Health & Illness*, *27*(7), 920–943. https://doi.org/10.1111/j.1467-9566.2005.00464.x

Dutton, W. H., & Helsper, E. J. (2007). *Oxford Internet Survey 2007 Report: The Internet in Britain*. Oxford, UK: Oxford Internet Institute, University of Oxford. Retrieved from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1327033

Ellison, N. B., Gray, R., Lampe, C., & Fiore, A. T. (2014). Social capital and resource requests on Facebook. *New Media & Society*, *16*(7), 1104–1121. https://doi.org/10.1177/1461444814543998

Ellison, N. B., Gray, R., Vitak, J., Lampe, C., & Fiore, A. T. (2013). Calling All Facebook Friends: Exploring Requests for Help on Facebook. In *Seventh International AAAI Conference on Weblogs and Social Media*. Retrieved from https://www.aaai.org/ocs/index.php/ICWSM/ICWSM13/paper/view/6130

Fogel, J., Albert, S. M., Schnabel, F., Ditkoff, B. A., & Neugut, A. I. (2002). Internet Use and Social Support in Women With Breast Cancer. *Health Psychology*, *24*(4), 398–404. https://doi.org/10.1037//0278-6133.21.4.398

Granovetter, M. S. (1973). The Strength of Weak Ties. *American Journal of Sociology*, *78*(6), 1360–1380. https://doi.org/10.1086/225469

Gray, R., Ellison, N. B., Vitak, J., & Lampe, C. (2013). Who Wants to Know?: Question-asking and Answering Practices Among Facebook Users. In *Proceedings of the 2013 Conference on Computer Supported Cooperative Work* (pp. 1213–1224). New York, NY, USA: ACM. https://doi.org/10.1145/2441776.2441913

Gui, M., & Argentin, G. (2011). The digital skills of Internet-natives. The role of ascriptive differences in the possession of different forms of digital literacy in a random sample of northern Italian high school students. *New Media & Society*, *13*(6), 963–980. https://doi.org/10.1177/1461444810389751

Hargittai, E. (2003). Informed Web Surfing: The Social Context of User Sophistication. In P. Howard & S. Jones (Eds.), *Society Online: The Internet in Context* (pp. 257–274). Sage Publications. Retrieved from http://dx.doi.org/10.4135/9781452229560.n16

Hargittai, E. (2010). Digital Na(t)ives? Variation in Internet skills and uses among members of the "Net Generation." *Sociological Inquiry*, *80*(1), 92–113.

Hargittai, E., Fullerton, L., Menchen-Trevino, E., & Thomas, K. Y. (2010). Trust Online: Young Adults' Evaluation of Web Content. *International Journal of Communication*, *4*, 468–494.

Helsper, E. J., & van Deursen, A. J. A. M. (2017). Do the rich get digitally richer? Quantity and quality of support for digital engagement. *Information, Communication & Society*, *20*(5), 700–714. https://doi.org/10.1080/1369118X.2016.1203454

Jenkins, H., Clinton, K., Purushotma, R., Robison, A. J., & Weigel, M. (2006). *Confronting the challenges of participatory culture: Media education for the 21st century*. Chicago: The John D. and Catherine T. MacArthur Foundation.

Jeon, G. Y. J., & Rieh, S. Y. (2015). Social Search Behavior in a Social Q&A Service: Goals, Strategies, and Outcomes. In *Proceedings of the 78th ASIS&T Annual Meeting: Information Science with Impact: Research in and for the Community* (pp. 39:1–39:10). Silver Springs, MD, USA: American Society for Information Science. Retrieved from http://dl.acm.org/citation.cfm?id=2857070.2857109

Kiesler, S., Zdaniuk, B., Lundmark, V., & Kraut, R. (2000). Troubles With the Internet: The Dynamics of Help at Home. *Human–Computer Interaction*, *15*(4), 323–351. https://doi.org/10.1207/S15327051HCI1504_2

Lin, N. (2001). *Social Capital: A Theory of Social Structure and Action*. Cambridge: Cambridge University Press.

Litt, E., & Hargittai, E. (2014). Smile, Snap and Share? A Nuanced Approach to Privacy and Online Photosharing. *Poetics*, *42*, 1–21. https://doi.org/10.1016/j.poetic.2013.10.002

Metzger, M. J., Flanagin, A. J., Markov, A., Grossman, R., & Bulger, M. (2015). Believing the Unbelievable: Understanding Young People's Information Literacy Beliefs and Practices in the United States. *Journal of Children and Media*, *9*(3), 325–348. https://doi.org/10.1080/17482798.2015.1056817

Morris, M. R., Teevan, J., & Panovich, K. (2010). What do people ask their social networks, and why?: a survey study of status message q&a behavior (pp. 1739–1748). Presented at the Proceedings of CHI 2010, Atlanta, GA, USA: ACM.

Oeldorf-Hirsch, A., Hecht, B., Morris, M. R., Teevan, J., & Gergle, D. (2014). To Search or to Ask: The Routing of Information Needs Between Traditional Search Engines and Social Networks. In *Proceedings of the 17th ACM Conference on Computer Supported Cooperative Work & Social Computing* (pp. 16–27). Baltimore, Maryland, USA: ACM. https://doi.org/10.1145/2531602.2531706

Patil, S., & Lee, K. (2016). Detecting experts on Quora: by their activity, quality of answers, linguistic characteristics and temporal behaviors. *Social Network Analysis and Mining*, *6*(5), 1–11.

Paul, S. A., Hong, L., & Chi, E. H. (2012). Who is Authoritative? Understanding Reputation Mechanisms in Quora. In *Proc. of Conference on Collective Intelligence - CI '12*. Retrieved from http://adsabs.harvard.edu/abs/2012arXiv1204.3724P

Plantin, L., & Daneback, K. (2009). Parenthood, information and support on the internet: A literature review of research on parents and professionals online. *BMC Family Practice*, *10*(34), 12. https://doi.org/10.1186/1471-2296-10-34

Putnam, R. D. (2000). *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.

Redmiles, E. M., Kross, S., & Mazurek, M. L. (2016). How I Learned to be Secure: a Census-Representative Survey of Security Advice Sources and Behavior. In *Proceedings of the 2016 ACM SIGSAC Conference on Computer and Communications Security* (pp. 666–677). Vienna, Austria: ACM Press. https://doi.org/10.1145/2976749.2978307

Robinson, L. (2014). Freeways, detours, and dead ends: Search journeys among disadvantaged youth. *New Media & Society*, *16*(2), 234–251. https://doi.org/10.1177/1461444813481197

Rowlands, I., David Nicholas, Peter Williams, Paul Huntington, Maggie Fieldhouse, Barrie Gunter, … Carol Tenopir. (2008). The Google generation: the information behaviour of the researcher of the future. *Aslib Proceedings*, *60*(4), 290–310. https://doi.org/10.1108/00012530810887953

Shillair, R. J., Rikard, R. V., Cotten, S. R., & Tsai, H.-Y. (2015). Not So Lonely Surfers: Loneliness, Social Support, Internet Use and Life Satisfaction in Older Adults. In *iConference 2015 Proceedings*. Newport Beach: iSchools. Retrieved from http://hdl.handle.net/2142/73666

Silverstone, R., & Hirsch, E. (Eds.). (1992). *Consuming Technologies: Media and Information in Domestic Spaces*. London and New York: Routledge.

U.S. Census Bureau. (2000). *United States Census 2000*. Retrieved from https://www.census.gov/main/www/cen2000.html

Utz, S., & Breuer, J. (2017). The relationship between use of social network sites, online social support, and well-being: Results from a six-wave longitudinal study. *Journal of Media Psychology: Theories, Methods, and Applications*, *29*(3), 115–125.

Vaidhyanathan. (2008). Generational Myth. *Chronicle of Higher Education*, *55*(4), B7–B9.

van Deursen, A. J. A. M., Courtois, C., & van Dijk, J. A. G. M. (2014). Internet Skills, Sources of Support, and Benefiting From Internet Use. *International Journal of Human–Computer Interaction*, *30*(4), 278–290. https://doi.org/10.1080/10447318.2013.858458

Vitak, J., & Ellison, N. B. (2013). 'There's a network out there you might as well tap': Exploring the benefits of and barriers to exchanging informational and support-based resources on Facebook. *New Media & Society*, *15*(2), 243–259. https://doi.org/10.1177/1461444812451566

Wasserman, I. M., & Richmond-Abbott, M. (2005). Gender and the Internet: Causes of Variation in Access, Level, and Scope of Use. *Social Science Quarterly*, *86*(1), 252–270. https://doi.org/10.1111/j.0038-4941.2005.00301.x

Williams, D. (2006). On and Off the 'Net: Scales for Social Capital in an Online Era. *Journal of Computer-Mediated Communication*, *11*(2), 593–628. https://doi.org/10.1111/j.1083-6101.2006.00029.x

Williams, R., & Edge, D. (1996). The social shaping of technology. *Research Policy*, *25*(6), 865–899. https://doi.org/10.1016/0048-7333(96)00885-2

Yang, J., Morris, M. R., Teevan, J., Adamic, L. A., & Ackerman, M. S. (2011). Culture Matters: A Survey Study of Social Q&A Behavior. *ICWSM*, *11*, 409–416.